



# NOAA FISHERIES

## ALASKA REGIONAL OFFICE

### HABITAT CONSERVATION DIVISION

### FY 2015 ACCOMPLISHMENTS REPORT

Habitat conservation, protection, and restoration are the foundation for sustaining the nation's fisheries. The mission of the Habitat Conservation Division (HCD) is to support healthy ecosystems, sustainable living marine resources, and resilient coastal communities. In accomplishing this mission, we work closely with the Alaska Fisheries Science Center (AFSC), other NOAA line offices, the North Pacific Fishery Management Council (Council), other federal and state agencies, non-governmental organizations, local governments, and a variety of industry and conservation groups. Through collaboration with these partners, the division is best able to prioritize its resources and activities, make decisions in an ecosystem context, and strengthen the science behind our decision-making. HCD carries out NOAA Fisheries' statutory responsibilities for habitat conservation in Alaska under the Magnuson-Stevens Fishery Conservation and Management Act (MSA), the Fish and Wildlife Coordination Act, the National Environmental Policy Act (NEPA), the Federal Power Act, and other laws. This report highlights HCD's activities from October 1, 2014 through September 30, 2015. Over the course of Fiscal Year (FY) 2015, HCD's work was focused in three main areas:

- Identification and conservation of Essential Fish Habitat (EFH) through fishery management activities;
- Environmental reviews of non-fishing activities to avoid, minimize, or offset the adverse effects of human activities on EFH and living marine resources in Alaska; and
- Participation in partnerships and implementing NOAA's Habitat Blueprint to support the activities listed above.

## ESSENTIAL FISH HABITAT & FISHERY MANAGEMENT 5-YEAR REVIEW

### 2015 EFH Five Year Review

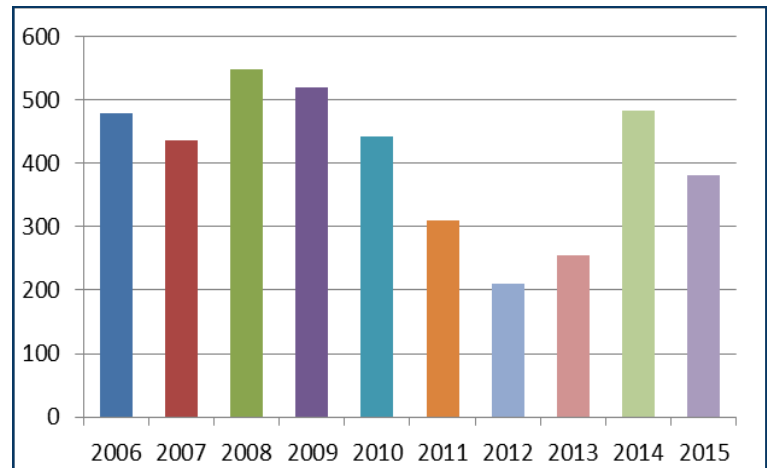
The national regulations implementing the EFH provisions of the MSA require a review of EFH information at least once every five years. Federal fisheries in Alaska are managed under six Fishery Management Plans: Bering Sea and Aleutian Islands Groundfish, Gulf of Alaska Groundfish, Bering Sea and Aleutian Islands King and Tanner Crabs, Pacific Salmon, Scallops, and the Arctic. All of these plans are undergoing review to update the ten EFH components within each Fishery Management Plan (FMP). HCD developed a coordinated strategy with the Council to meet the five-year review.

The EFH Review made significant progress between the AFSC, the Council, and NMFS Alaska Region (AKR). Since 2006, direct EFH allocations and Regional Office discretionary funds totaling over \$4 million will incorporate these funded science findings into the 2015, five-year review. During the September, 2015 Council Joint-Groundfish Plan Team meeting, HCD presented an EFH Review update. Discussions centered on 1) the EFH Descriptions of the Geographic Additive Model (GAM), 2) the Fishing Effects Model (FEM), 3) Review of the Non-Fishing Report, and 4) scheduling. Further progress includes refining the GAMs and gathering fishing gear descriptions from the industry to combine with Vessel Monitoring System trackline data to accurately depict fishing effort in a spatially explicit manner. The report will address comments from the Council's Scientific and Statistical Committee (SSC), as well as those received prior from the Center for Independent Experts regarding spatial management. HCD staff has been working

## 2015 EFH Five Year Review Cont...

with the Marine Conservation Alliance and Alaska Pacific University (APU) to develop a time series of maps of spatial management/closure areas of North Pacific Fisheries, beginning with the MSA authorization in 1996 to the present day. It is intended to depict the evolution of their purposes and extent; beginning with a few seasonal patches in the 1970s to a vast network of closures and spatial conservation measures that reflect multiple objectives. The schedule was modified to lessen the direct burden of staff conducting simultaneous stock assessments and to take advantage of recently funded science and contracts.

On a parallel track to the EFH Review, stock assessment authors are to rank fishery stocks under the Habitat Assessment Prioritization process, as developed by NMFS's Science and Technology Division (S&T). S&T, AFSC, and HCD worked with the authors to ensure the process and schedule to score stocks will be presented in a series of rubrics. Results will be summarized and offered to the Council for comment when completed.



EFH Research Funded Projects by Year (\$K)

## Bering Sea and Aleutian Islands (BSAI) Skate Habitat Areas of Particular Concern

On January 5, 2015, Amendment 104 to the BSAI Groundfish FMP was amended to identify six discrete skate egg concentration sites in the BSAI as Habitat Areas of Particular Concern (HAPCs). While no specific management measures were taken to conserve these HAPCs, the public process lead to better informed stakeholder groups and the fishing industries. This amendment stemmed for the EFH 2010 Five Year Review .

## Development of a Bering Sea Fishery Ecosystem Plan

HCD staff is an active participant on the North Pacific Fisheries Management Council's Ecosystem Committee. The Council has been considering whether to develop a Bering Sea Fishery Ecosystem Plan (FEP) since June 2013, including what the objectives might be for a Bering Sea FEP and how the plan could be structured to benefit fishery management decision making. Between February and October 2014, the Council received public input from stakeholders and its advisors, which expressed interest in developing an FEP, although caution about the resources involved. In October 2014, the Council requested the Ecosystem Committee continue work to draft a set of goals and objectives for Council consideration. Subsequently, the Ecosystem Committee has developed a proposed approach and format for an FEP and incorporated the Committee's recommendations for presentation to the Council during the December 2015 Council meeting.



Red King Crab, Photo: NOAA

## Red King Crab

NMFS scientists and fishery managers seek to better understand recreational and industrial marine mining activities in Norton Sound, Alaska. A recent increase in offshore mining activities has NMFS concerned with potential adverse impacts to habitat for this isolated Red king crab stock. A barrier to assessing the habitat needed to support crab centers on the lack of site-specific information. In 2013, NMFS funded a graduate student to gather acoustic information, delineate mining locations, assess crab condition, and several other habitat variables that marine mining may be having on the



## Red King Crab Cont...

seafloor. In 2014, researchers used an unmanned surface vessel to survey the East Public Mining Area with multi-beam and Didson sonar to test its utility and usefulness to assess crab habitat. This test was a success. In June/July of 2015, researchers returned and re-surveyed 70 kms of transects to analyze whether mining impacts were re-set over the winter by ice scouring and winter storm events. The surveyed area is likely important to juvenile and female red king crab. Most recently in February 2016, satellite tags were attached to female red king crabs to track their movements. Most of this work was coordinated with NMFS's Kodiak Fisheries Research Center and the Fisheries and Aquatic Science & Technology program at APU. Results from the habitat surveys and crab movements will inform all the stakeholders as to whether or not mining may affect crab. This points to another success - in that commercial crab fisherman, several gold miners, NMFS and Alaska Department of Fish and Game (ADF&G) biologist, managers, academia partners, and the community worked in unison to gather this information.

## EFFORTS TO MINIMIZE HABITAT LOSS

### Mitigation Banking and In-Lieu Fee Programs

HCD continued to work with the Corps of Engineers (COE) and other agencies per our Memorandum of Understanding with the COE to review individual and programmatic compensatory mitigation in the State of Alaska on the Statewide Interagency Team (SIRT) and Individual Review Teams (IRT). HCD staff has provided input to numerous IRT and SIRT issues over a wide area of the State. Our suggestions have been incorporated into plans and functional assessment methodologies and have sought to benefit anadromous and marine fishery habitats in this process.

Some of the actions related to this topic include development of a rapid assessment methodology for the North Slope, Southeast Alaska Watershed Coalition's In-Lieu Fee Program Instrument, the James Toman Mary Redmond Reserve Mitigation Bank and the Conservation Fund In-lieu Fee Program. The SIRT has been addressing a number of topics including defining service areas, improving guidance to sponsors by the development of check lists/templates, the role of preservation in Alaska and how to define a credit. In all cases, HCD promotes the function and value of wetlands, streams, estuarine and marine habitats to fisheries and seeks to incorporate their consideration into functional assessments and areas used as compensatory mitigation.

### Oil Spill Planning and Preparedness

HCD and Protected Resources Division (PRD) staff alongside the Alaska Regional Response Team, numerous federal, state, local and industry participants review and update the regional subsections of the Alaska Federal/State Preparedness Plan for Response to Oil & Hazardous Substance Discharges/Releases. These plans coordinate the response to a discharge, or substantial threat of discharge of oil and/or a release of a hazardous substance within the boundaries of Alaska and its surrounding waters, including EFH and HAPC.

### NOAA Fisheries' Restoration Center's Contributions to HCD

The NOAA Restoration Center (RC) is dedicated to restoring the nation's coastal ecosystems and preserving diverse and abundant marine life. Together, the RC and HCD form the Habitat Enterprise in Alaska. HCD staff works closely with RC staff to restore degraded habitats; advances the science of coastal habitat restoration; shares restoration techniques; and fosters long-term stewardship of marine and coastal habitats.

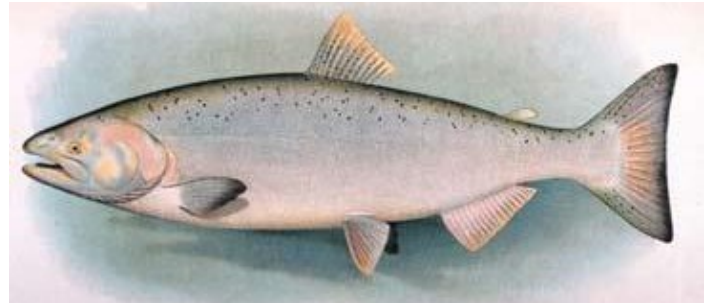
Although Alaska habitats are relatively pristine, we recognize areas that habitat resiliency to climate change depends on healthy populations and intact ecosystems. In Alaska, the RC is working on innovative approaches in areas such as oil spill preparedness and activities that employ measures to restore habitat functions. In other areas we are working closely with our partners to implement conservation and preservation activities prior to species decline.

**Abandoned and Derelict Vessel Taskforce:** In Alaska, the RC is NMFS's representative on Alaska's Abandoned and Derelict Vessel Taskforce. Work continued on acquiring funding (\$70,000) for an assessment of removal costs of numerous vessels in Steamboat Slough, a subsistence fishing area on the Yukon River in southwest Alaska.

## NOAA Fisheries' Restoration Center's Contributions to HCD Cont...

### **Kenai Peninsula Aquatic Ecosystem Restoration Project:**

In 2012 the Department of Commerce declared Chinook salmon returns to Cook Inlet a fisheries disaster. In 2015, NMFS and federal and State partners applied for and received \$7.5 Million from the Exxon Valdez trustee Council for the Kenai Peninsula Aquatic Ecosystem Restoration Project. This project with more than \$10 million in match from the Alaska Department of Transportation will eradicate fish passage as a contributing factor to Chinook salmon decline in the Kenai Peninsula.



Chinook Salmon, Image: NOAA

**Arctic Trajectory Analysis Planner (TAP) Model:** \$215,000 was secured from a National Fish and Wildlife Foundation grant application for the generation of an Arctic TAP model. The TAP is a software tool designed to help develop a plan that protects against likely oil spills. TAP presents graphical output in five modes:

- Shoreline Impact Analysis helps to answer: If oil is spilled at a given spot, what shoreline locations are likely to be affected?
- Response Time Analysis helps you estimate how quickly a response must be mounted at a location of concern to precede the arrival of the oil.
- Site Oiling Analysis helps you visualize how a location of concern would likely be oiled by a spill at a given location.
- Threat Zone Analysis helps to answer: Where might a spill occur that could threaten a particular location of concern?

### **Eklutna**

HCD staff attended a meeting by Eklutna Inc. and the Conservation Fund on the removal of the Eklutna dam to improve fish passage and sediment transport in the Eklutna River. NOAA RC offered the services of their fish passage engineer and will be reviewing the conceptual plans created by a contractor on the design work. Early contact and information sharing ensures the best viable options to minimize habitat loss.

## **NATIONAL & ALASKA FISH HABITAT PARTNERSHIPS**

In partnership with the RC, HCD has improved NOAA's presence and capacity in the Alaska fish habitat partnerships. Our participation in the Fish Habitat Partnerships has increased efforts to develop action plans that target marine, estuarine, and fresh water resources of concern, including supporting ecosystem processes and habitat attributes from headwater tributaries through nearshore marine waters.

Alaska has four fish habitat partnerships, and HCD participates as a member in each partnership. These partnerships include: 1. The Southwest Salmon Habitat Partnership, 2. The Matanuska-Susitna (Mat-Su) Basin Salmon Habitat Partnership, 3. The Kenai Peninsula Fish Habitat Partnership, and 4. The Southeast Alaska Fish Habitat Partnership.

**The Southwest Alaska Salmon Habitat Partnership:** The Southwest Alaska Salmon Habitat Partnership is co-chaired by NOAA RC staff. In 2015, this partnership funded several programs: Partnership Coordination (\$75,000), Digital Mapping Tool for Village Corporation Land Planning (\$20,000 ) and Long-term Water Quality Baseline Monitoring (\$162,420) The partnership also supported:

- Completion of instream flow reservations on the Mulchata and Stuyahok Rivers, Kaskanak Creek and Upper Talarik Creek and continuation of Chulitna instream flow reservation by Lake Clark National Park and Preserve to collect long-term water flow data and protect intact and healthy waters through Alaska law;



## NATIONAL & ALASKA FISH HABITAT PARTNERSHIPS Cont...

- Ongoing fish distribution surveys by the Bristol Bay Heritage Land Trust in headwater streams that enter Lake Iliamna and the likely addition of 100+ miles to Alaska's Anadromous Waters Catalog to collect data on fish presence/absence and life stage and protect fish in intact and healthy waters through Alaska law;
- Development of a geo-spatial predictive model of fish distribution and habitat use at various life stages throughout Southwestern Alaska to facilitate permitting decisions and make anadromous stream surveys more efficient;
- Acquisition of conservation protections on 1000 + acres of private land by The Conservation Fund and the Bristol Bay Heritage Land Trust to prevent fragmentation of habitat resulting from inappropriate development;
- Continuation of the Bristol Bay River Academy by Bristol Bay Heritage Land Trust, Trout Unlimited, Bureau of Land Management, Bristol Bay Native Corporation and others, to assure a future local constituency for fish habitat protection;
- Leveraging implementation of the 5-year monitoring plan for headwater systems in the Nushagak and Kvichak watersheds by Bristol Bay Heritage Land Trust and other partners to track climate change effects and impacts from mining operations should they be permitted;
- Implementation of a stream temperature monitoring plan for Bristol Bay by Bristol Bay Native Association and Bristol Bay Heritage Land Trust to track climate change impacts on stream temperatures;
- Distribution of the Sailing for Salmon exhibit celebrating the Bristol Bay commercial fishery to three venues in the Pacific Northwest to foster a wider constituency for the protection of salmon habitat in Bristol Bay; and
- Bristol Bay Heritage Land Trust will continue to provide coordination support for the Partnership including preparation for science workshops, convening partnership and committee meetings and securing matching funds for partnership funded projects.

**The Mat-Su Basin Salmon Habitat Partnership:** NOAA RC staff serves on the steering committee. In 2015, this partnership funded:

- ⇒ Mat-Su Salmon Partnership Outreach and Coordination (\$102,877),
- ⇒ MatSu Water Reservation Program Flow Acquisition to Protect Salmon Habitat (\$10,000),
- ⇒ Rapid Response for MatSu Elodea,
- ⇒ Alexander Lake Eradication Project to Restore Salmon Habitat (\$37,000),
- ⇒ MatSu Fish Passage/Barrier Removal Program (\$429,000),
- ⇒ Region II Forest Resources & Practices Act Effectiveness Project (\$20,000),
- ⇒ MatSu Stream Thermal Regimes and Watershed Classification (\$37,702),
- ⇒ Assessment of Lake Habitats Important to overwintering Coho Salmon and Climate Change (\$27,563),
- ⇒ Integrated Platform for Mapping of Hydrography, and
- ⇒ Salmon Habitat and Active River Processes (\$487,585).

**The Kenai Peninsula Fish Habitat Partnership:** NOAA RC staff serves on the steering committee. In 2015, this partnership funded: Eradication of Elodea from the Kenai Peninsula (\$50,000 ), Stream Watch Volunteers: Protecting Salmon Habitat Threatened by Climate Change (\$10,000), Salmon Outreach Strategy (18,000), Launching Cook Inlet Response Tool for Operational Use (\$24,750), Understanding Effects of Roadways on the temperature and movement of Groundwater in Peatland systems (\$4,300), and Salmonland (\$10,500).

**Southeast Alaska Fish Habitat Partnership (SEAKFHP):** HCD staff participated in bi-monthly meetings of SEAKFHP. This partnership was formally recognized in 2014 and is moving from an organizational phase to more of an action/implementation phase. It recently received grant funding from U.S. Fish and Wildlife Service (USFWS) and from the National Fish and Wildlife Foundation which fund the half time coordinator position and other projects. The Steering Committee is working on the 2015 Annual Work Plan as well as the 2015 National Assessment. SEAKFMP members collaborated with North Pacific Landscape Conservation Cooperative (NPLCC) resulting in a project concept that would advance the Tongass vulnerability assessment.

## **NATIONAL & ALASKA FISH HABITAT PARTNERSHIPS Cont....**

### **Habitat Blueprint**

The Kachemak Bay Habitat Focus Area (HFA) Received ~\$180K in FY15 from the HFA Federal Funding Opportunity (FFO). Using these funds, the successful applicant will work on Bivalve habitat suitability and restoration in the Habitat focus area. This is in response to recent drops in the shellfish populations in the area resulting in closure of shellfish harvesting. This work will aid in understanding the decline as well as a pilot project in replanting stocks. NMFS Office of Habitat Conservation (OHC) also funded a project to investigate invasive species in the HFA by APU. Currently students are working with Kachemak Bay National Estuarine Research Reserve to create a literature repository on marine invasive species and will create a protocol for go pro use in invasive species monitoring providing a methods paper for community organizations to use for community monitoring. In addition RC provided training to the APU scuba diving class on scuba protocols for invasive species in Kachemak Bay. Currently NOAA RC and NOS are working on the HFA implementation Plan.

### **Alaska Shorezone Coastal Mapping and Imagery**

The Alaska ShoreZone program goal is to collect aerial imagery and map habitat features for Alaska's entire coastline and to make the imagery and the data both "physically and intellectually" accessible to everyone. Since 2001, more than 50 partners have contributed to the Alaska ShoreZone Program. The AKR, through the efforts of HCD, has a prominent role in the partnership. Annual meetings of all the partners are held to review ShoreZone progress and highlight the uses of ShoreZone as well as plan for the next year's activities by establishing priorities, goals, and solidifying the partnership.

Alaska ShoreZone has been funded by many partners throughout the years. Noteworthy in 2015 include NMFS's contributions. These include: adding new features to the ShoreZone website at <http://alaskafisheries.noaa.gov/mapping/szflex/>; being an active member on the ShoreZone Steering Committee; helping to plan and participating in the annual ShoreZone partner meeting; doing ShoreZone outreach and presentations at three major scientific meetings (the Alaska Marine Science Symposium, the Alaska Forum on the Environment, and the American Fisheries Society meeting); coordination with NMFS Marine Mammal Laboratory and NMFS PRD staff on appropriate mitigations during imaging surveys; funding and contracting new ShoreZone work; and updating the ShoreZone web site with new data and ShoreZone resources.

Major ShoreZone deliverables received included mapping data for 3,324.5 km (2,066 miles) of shoreline along the Yukon-Kuskokwim Delta and on Nunivak Island. AKR contracted this work in FY 2104 which included partner contributions through an inter-agency agreement with the Yukon Delta National Wildlife Refuge, the National Wildlife Refuge System Office of Realty and Conservation Planning, and the National Wildlife Refuge System Office of Natural Resources. Additional ShoreZone deliverables included video and still imagery for 1,907 km of shoreline and mapping data for ~196 km of shoreline in Norton Sound. Imagery is now available on-line for over 86% (70,735 km or 43,952 miles), of Alaska's approximate 82,000 km (~51,000 miles) of shoreline.

**Imagery is now available  
online for over 86% of  
Alaska's approximate  
51,000 miles of shoreline,  
or about 43,952 miles!**



Please visit <https://alaskafisheries.noaa.gov/habitat/shorezone> for more info.

Photo: NOAA

**FOR MORE INFORMATION: <https://alaskafisheries.noaa.gov/>**

## Alaska Shorezone Coastal Mapping and Imagery Cont...



Figure above shows the current extent of ShoreZone imagery, mapping data, and future

Additional ShoreZone accomplishments included contracting tasks to be accomplished in 2016. A task order was awarded for \$432,500 which included \$424,500 of AKR FY15 year end funds and \$8,000 from Alaska NOAA Collaboration Team. The following tasks were strategically selected and funded, taking into consideration what other ShoreZone partners have funded or are expected to fund in the future. The task order included: mapping Norton Sound imagery (~2,196 km); imaging and mapping Semidi and Cirikof Islands in the Gulf of Alaska (~189 km); updating the ShoreZone Protocol; and imaging the eastern Aleutian Islands (~2,200 km).

## HYDROPOWER AND ENERGY

### Battle Creek Diversion to Bradley Lake

Bradley Lake is Alaska's largest existing hydroelectric project with 120 megawatts of generating capacity. Alaska Energy Authority (AEA) has been working to increase Bradley Reservoir's watershed catchment area by seven square miles for the last four years to augment the annual energy production. This would be accomplished by building a diversion dam in the adjacent Battle Creek drainage and piping the water captured downstream of the Battle Creek Glacier two miles to Bradley Lake. The project proponents would like to divert 75-90% (25,000-36,000 acre feet) of the water from the Battle Creek to Bradley Lake. NMFS, The US Fish and Wildlife Service (USFWS) and ADF&G have been working with AEA to determine the correct amount of water to leave in Battle Creek each month such that all stages of the coho salmon life cycle can function well.

### Talkeetna River Hydropower Project

A proposed project on the Talkeetna River would include a 370 foot-high dam about 30 miles upstream of the town of Talkeetna. This project is located at a point that would impact salmon runs to the Talkeetna River, Disappointment Creek, Prairie Creek, Stephan Lake, and Iron Creek. Salmon species documented in the ADF&G Catalog of Anadromous Waters include: Chinook, sockeye, coho and chum salmon, listed many miles above the proposed dam site. Fish passage would likely be necessary. The inundation proposed would flood more than 12 square miles of river valley habitat that would appear to be prime moose calving and over-wintering habitat. In December of last year, HCD was notified of an application for Preliminary Permit for Jack River Dam which is in the same vicinity near Cantwell. The Jack River is anadromous and supports all five species of Pacific salmon. While NMFS filed a Motion to Intervene on both projects, both are at the very initial scoping phase. The average time from initial concept to construction is usually 5-10 years and we note that many more projects file for preliminary permits than are actually built.

### Climate Change and Hydropower in Alaska

The Government Accountability Office is reviewing federal agency efforts to consider impacts of climate change on habitat. NMFS's submission includes habitat restoration and protection "case study" highlights prepared by the



## Climate Change and Hydropower in Alaska Cont...

OHC. Five stories underscore the broad role of habitat conservation in ecosystem-based management of fisheries and showcase how OHC is applying climate change considerations. Four of those include climate change considerations in the Russian River Habitat Focus Area, new flood frequency estimates for New England, increased floodplain resilience in Puget Sound, and a national science needs assessment for the national network of Landscape Conservation Cooperatives. The fifth study includes the process and challenges of incorporating climate change considerations for very long-term hydropower licensing process in Alaska.

## Susitna-Watana Hydroelectric Dam

HCD staff continued to play a lead role in the Federal Energy Regulatory Commission's (FERC) licensing process for the AEA's proposed Susitna-Watana Hydropower project. As proposed, the project would be located on the Susitna River in Southcentral Alaska, about 100 miles east of Denali National Park and 200 miles upriver from Anchorage and consist of a 750 concrete dam and a reservoir over 42 miles long; which has the potential to change the annual, daily, and hourly patterns of river discharge.

HCD is involved in 21 studies related to project baseline and effects. HCD has identified experts from within and outside of NMFS to participate in the project review and licensing and process in areas as diverse as climate change, fish passage and structured decision support. The result is that NMFS has provided high quality, focused, and very effective review of the pre-licensing studies being developed and conducted for this project. This has been done through \$1 million dollars in annual funding provided to both NMFS and the USFWS by the project applicant, the AEA, and through \$225,000 in funds provided the national hydropower program's Science and Technology fund.



HCD's Jeff Davis tests waters of the Susitna River.  
Photo: NOAA

Many other hydropower projects have benefitted from HCD's coordination and teamwork. Notably, the Allison Creek project near Valdez, the Yakutat Wave project, and the Iguigig test-site for instream hydrokinetic projects, and 25 other hydropower projects.

## TRAINING & OUTREACH

**June 2015**-The COE Alaska District conducted a training course for their staff entitled - Alaska Coastal Projects: Information, Application, and Challenges. HCD was invited to present on EFH coordination/consultation. This venue provided an opportunity for HCD to discuss EFH basics for COE staff. Time was allotted to discuss key impacts for coastal projects using example EFH Consultations. **November 2014**-HCD staff gave an oral presentation at the 'Restore America's Estuaries 7th National Summit and 24th Biennial Meeting of The Coastal Society. **November 2014**: HCD staff participated in the NFHP Workshop as a Steering Committee member of the Southeast Alaska Fish Habitat Partnership. This focused on communication & outreach collaboration. HCD staff learned more about the operations/goals/activities of the NFHP including progress toward the next National Fish Habitat Assessment. **December 2014** - HCD staff attended American Geophysical Union Annual Meeting and presented a paper in the Information and Knowledge for Societal Decision Making Session entitled "Hydropower licensing and evolving climate: climate knowledge to support risk assessment for long-term infrastructure decisions." The meeting brings together the Earth-science-related community for discussions of emerging trends and research. **June 2015**-June is NOAA's Habitat Month. AKRO and HCD developed a habitat success story as part of national effort and the Regional Communications Council. The story touched-on the many facets of HCD and habitat conservation efforts. For the full story please go to [http://www.nmfs.noaa.gov/stories/2015/06/06\\_26\\_15crab\\_collaboration.html](http://www.nmfs.noaa.gov/stories/2015/06/06_26_15crab_collaboration.html)



## NEW & NOTEWORTHY

### WELCOME ABOARD!



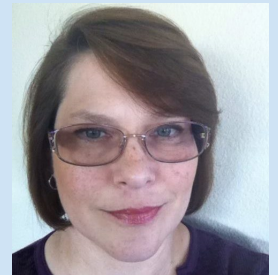
**Seanbob Kelly** officially joined HCD in April 2016. No stranger to the NMFS AKR, Seanbob completed his Knauss Marine Policy Fellowship in 2008 and began working a Sustainable Fisheries SFD that same year. He has been working on non-fishing consultations under MSA\EFH and focusing on oil and gas activities affecting the marine environment. Seanbob completed his B.S. in Fisheries Science and his M.Sc. in Fisheries Oceanography, both from University of Alaska Fairbanks. Seanbob spends most of his time caring for his two small children.

**Sean Eagan** joined the team in July as a hydrologist. Sean is coming to us from the National Park Service in Pago Pago, American Samoa. As the Chief of Resource Management, for the National Park Service, Sean spent the last few years working closely with National Park Service and NOAA staff on issues involving the marine sanctuary and resources of mutual concern. Sean has a B.S. in Forestry and Resources Management from the University of California, Berkeley and a M.S. in Hydrologic Sciences from the University of California, Davis. Sean will be working on statewide issues related to hydrology and fish habitat.



**LT Charlene Felkley** arrived in Anchorage in Sept., also transferring from American Samoa. Charlene is a NOAA Corps Officer filling the Resources Specialist Billet in Anchorage for the next 3 years, providing EFH consultations to other federal agencies. Charlene is coming to us from Pago Pago, where among other duties, she lead and oversaw the development of a new marine operations program; including vessel and dive programs at the National Marine Sanctuary of American Samoa. Charlene has a B.S. in Natural Resource Management from The Ohio State University and a master's degree in Global Leadership and Sustainable Development from Hawaii Pacific University. In addition to her time with NOAA Corps, Charlene also spent time with the Peace Corps in West Africa.

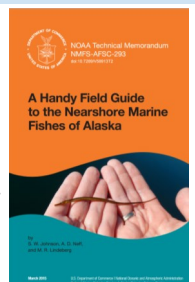
Since July, **Laura Hamm** has provided administrative support for the Anchorage Office. Laura has brought clerical and administrative expertise as well diverse geographic knowledge to the position. Laura has an Associate degree in Administrative/Secretarial studies from Mid-State Technical College in Wisconsin. Laura's clerical and administrative experience includes working in support of legal and medical offices; as well as spanning many geographic locations including Wisconsin, Germany, Arizona, Nevada, Japan, and Alaska.



**Matthew Eagleton** accepted the position of Supervisory Fisheries Biologist in the NMFS's Anchorage Field Office in Feb. His position also serves as Deputy to the Assistant Regional Administrator for HCD. Matt has been with NOAA for over 28 years. In his prior work, Matt was engaged with our Science Centers as a Senior Watch Officer, Fisheries Officer, Executive Officer, and Commanding Officer of several NOAA vessels conducting research spanning the Pacific Ocean, North Pacific Ocean, Gulf of Alaska, Bering Sea, Aleutian Islands, and the Arctic. Matt also filled the Alaska Region's NOAA Commissioned Corps billet twice before being hired as staff. Most of the time Matt specifically serves as our Regional EFH Coordinator, in addition to his new supervisory role and assisting in the day-to-day operations at the office.

### **Nearshore Marine Fishes of Alaska Field Guide**

A Nearshore Fishes of Alaska Field Guide was recently published in July 2015. Funding for much of the field work and production of the guide was made possible with EFH funding. Over the last decade, HCD staff worked alongside AFSC researchers, the NOAA Corps, and many others to conduct sampling, operate skiffs, provide logistics, and get the word out to solicit support. The release of this guide provides marine nearshore fish information to scientists and anyone interested alike. The guide is available at the following website: <http://www.afsc.noaa.gov/Publications/AFSC-TM/NOAA-TM-AFSC-293.pdf>.



## FINAL WORD

NOAA's long-term goal of Healthy Oceans - marine fisheries, habitats and biodiversity sustained with healthy and productive ecosystems - begins with healthy habitats. The work that the HCD engages in; to conserve, protect and restore living marine resources, through consultations and other activities, is critical in providing for resilient coastal communities and ecosystems. Healthy habitat is necessary for sustainable fisheries, protected resources, and in almost every other NOAA and NOAA Fisheries program. Simply put, the work that HCD does, provides the foundation for the "house that NOAA built."

In 1996 Congress strengthened that foundation by amending the Magnuson-Stevens Act to include EFH provisions. Congress stated in the Act, "One of the greatest long-term threats to the viability of commercial and recreational fisheries is the continuing loss of marine, estuarine, and other aquatic habitats." All living marine resources are vulnerable to habitat degradation, which can threaten the biodiversity on which they depend. These habitats are at risk from human activities which degrade or destroy habitat quality and quantity. HCD's efforts to conserve habitat are as diverse as the resources NOAA Fisheries' manages. These efforts are both reactive and proactive in nature and staff involvement in these activities includes: identification and conservation of EFH through fishery management activities; environmental reviews of non-fishing activities to avoid, minimize, or offset the adverse effects of human activities on EFH and living marine resources in Alaska; and participation in partnerships and the NOAA Habitat Blueprint.

The national regulations implementing the EFH provisions of the Magnuson-Stevens Act require a review of EFH information at least once every five years. For the 2015 review, HCD is working on new analytical methods to describe EFH; updating the FEM with recoding of the previous long-term effects index; and, updating and expanding the non-fishing effects document to include climate change, ocean acidification, and marine transportation. As Alaska has a resource extraction based economy, on the non-fishing review side we are involved in a myriad of issues from hydropower development, mining, oil and gas development, and infrastructure development to addressing the potential for the introduction of an invasive species.

**Not exciting enough for you yet?** This summer we are continuing our work to research marine mining impacts on red king crab habitat in Norton Sound. A gold rush has recently struck in the Norton Sound area, but it is unknown whether the mining boom in the marine environment may be harming habitat for red king crab – which provides a sustainable fishery and economic engine for the Alaskans who live and work along the West Coast of Alaska in the Norton Sound Area.

There is so much more to tell, but not so much more room. If you want to know more just ask an HCD staffer. They'll tell you - "Habitat is where it's at."



Running Salmon  
Photo: NOAA's Alaska Fisheries Science Center

**Jeanne Hanson**  
Assistant Regional Administrator  
Habitat Conservation Division